

ABSTRACTANTENNA ASSEMBLY

5 The invention provides for a planar antenna assembly supported on a substrate. The antenna includes a monopole element (102; 202), at least one grounded parasitic element (104, 106; 204, 206) located proximate the monopole element (102; 202), wherein each grounded parasitic element (104, 106; 204, 206) is grounded to a planar ground plane and incorporates a conductive profile shaped so that the separation between the parasitic
10 element and the monopole adjacent it, varies along the length of the parasitic element. In one embodiment, the separation between the monopole and the parasitic element is provided by a stepped or angled edge on the or each grounded parasitic element, and the profile faces and extends away from monopole element (102; 202). The antenna may include two grounded parasitic elements (104, 106; 204, 206) located on opposite sides of
15 the monopole element (102; 202) and the, or each, grounded parasitic element (104, 106; 204, 206) may include a foot (112, 114; 208, 210) extending towards a base part of the monopole element (102; 202) which is adjacent the ground plane. The particular shape of the parasitic elements provides for good wideband performance and the antenna may find particular application in small or handheld devices where small form-factor antennas are
20 required.